

PRELIMINARY EDITION
SUMMARY OF
MARC FORMAT SPECIFICATIONS
FOR TECHNICAL REPORTS

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I. INTRODUCTION

This document describes the MARC content designators for bibliographic records for technical reports. These technical report specifications are an extension of Books: A MARC Format (5th ed, 1972, and Addendum 1-20) which was recently subsumed in MARC Formats for Bibliographic Data (1980). It also includes changes to that format that have been approved but not yet added to the format documents through August 1980. Additional data elements have been added at both the field and subfield levels, but the MARC books data elements form the basis. While many data elements identified for books may never be required for technical reports, they remain defined and available to assure consistency. The additional data elements added for technical reports will also be added as required to MARC formats for other types of material such as serials. New data elements added for technical reports to the format for books are indicated by a double asterisk (**).

For the purpose of this document, technical reports are identified as documents formally presenting the results of scientific, technical, or management activities and providing information of more than transient interest. They are usually produced in sufficient quantity to be initially distributed only to a limited number of recipients but also are often placed in a central repository from which secondary distribution is available. Many reports are issued in numbered monographic series. A series typically reflects the range of tasks being undertaken by the issuing corporation or agency and typically does not constitute a sequence of works on a single subject or related subjects.

The data elements that have been added to the Books format are largely to accommodate differences in item identification and problems introduced by the non-conventional availability of reports. These specifications are for creating records for individual reports, not for report series. Records for report series should follow the specifications of the MARC serial format.

The MARC formats are an implementation of the American National Standard Format for Bibliographic Information Interchange on Magnetic Tape (ANSI Z39.2 1971). The machine codes for recording data in MARC records are part of the expanded American Standard Code for Information Interchange (ASCII). Lists of these codes, plus lists for three bibliographic codes (Country of Publication, Language, and Geographic Area) used in this format, can be obtained from the Subscriber Accounts Unit of the Library of Congress, Cataloging Distribution Service. The tape format is described in "Specifications for magnetic tapes containing catalog records in the MARC II format" which is also available from the Cataloging Distribution Service.

Other pertinent ANSI standards related to technical reports include the American National Standard Technical Report Number (STRN) ANSI Z39.23-1974) and American National Standard Guidelines for Format and Production of Scientific and Technical Reports (ANSI Z39.18-1974).

The MARC specifications for technical reports were prepared at the Library of Congress by Sally H. McCallum under the general direction of Henriette D. Avram, Director, Network Development Office. The work was carried out in close consultations with Mary Kay Daniels Ganning of the Automated Systems Office. The Federal Library Committee contributed significantly to the effort by organizing reviews of the specifications and typing this document. Persons from Processing Services and the Science and Technology Division of the Library of Congress, among others, were also responsive to questions and requests for review.

The extensions that have been added to accommodate technical reports are summarized below:

Technical report numbers: new field 027 for the Standard Technical Report Number (STRN) and 088 for other technical reports numbers.

Contract, grant and project numbers: new field 536 that specifies separate subfields for these numbers.

Distribution agency numbers: extension of field 037 to accommodate distribution information.

Sponsoring, performing, and funding agency identification: new subfield for all entry fields for coded relator data.

Subject terms and codes from special thesauri: extension of the subject category code field 072 and the 6xx subject heading fields to allow terms from additional thesauri; new subject term field 653 for free text terms.

Author affiliation and address: addition of subfield for affiliation or address to all author entry fields.

Enriched titles: new field 214 for titles that have been augmented by the cataloger.

Number of references and pages: new field 302 for page count and additional subfield in field 504 for number of references.

Related reports: related item fields, formerly only defined for serials, added to allow linkage through report numbers to superseded reports, reprints of reports, etc.

Type of report and period covered: new field 513 created for this information.

Identification of technical reports: new forms of contents code added to the 008 data.

II. SUMMARY OF THE MARC COMMUNICATIONS FORMAT STRUCTURE

Leader	Record Directory	Control Fields	Variable Fields
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A. LEADER

The leader is fixed in length for all records and contains 24 characters.

B. RECORD DIRECTORY

The record directory is made up of a series of fixed-length entries (12 characters each) that contain the identification tag, the length, and the starting character position in the record of each of the variable fields. The record directory will end with a field terminator code (1E₁₆, 8-bit; 3E₈, 6-bit).

C. CONTROL FIELDS

The control fields contain alphameric data elements, many of which have a fixed length. These fields end with a field terminator code. Each control field is identified by a three-character numeric tag in the record directory.

D. VARIABLE FIELDS

The variable fields are made up of variable-length alphanumeric data. All fields end with a field terminator code. Each variable field is identified by a three character numeric tag in the record directory and tags may be repeated as required in a logical record.

E. RECORD TERMINATOR

The last field terminator in the record, which is usually for a variable field, is replaced by an end-of-record code ($1D_{16}$, 8-bit; 35_8 , 6 bit).

III. MARC RECORD FORMAT FOR TECHNICAL REPORTS

A. LEADER

Outline of Leader

0	4	5	6	7	8	9	10	11	12	16	17	18	19	20	21	22	23
Record Length	Status	Type of Record	Biblio. Level	Blanks	Indicator Count	Subfield Code Count	Base Address of Data	Encoding Level	Desc. Cata. Form	Blank Length	Length	Undefined	Undefined				

	<u>Name of Leader Data Element</u>	<u>Number of Characters</u>	<u>Character Position in Record</u>
(1)	Logical Record Length	5	0-4
(2)	Record Status	1	5
(3)	Legend		
	(a) Type of Record	1	6
	(b) Bibliographic Level	1	7
	(c) Blanks	2	8-9
(4)	Indicator Count	1	10
(5)	Subfield Code Count	1	11
(6)	Base Address of Data	5	12-16
(7)	Encoding Level	1	17
(8)	Descriptive Cataloging Form	1	18
(9)	Blank	1	19
(10)	Entry Blank		
	(a) Length of Length-of-Field	1	20
	(b) Length of Starting-Character-Position	1	21
	(c) Undefined Characters	1	22-23

CONTENTS OF LEADER

(1) Logical Record Length

This consists of the total number of characters in the logical record including itself. The number is right justified with leading zeros.

(2) Record Status n, c, d, a, or p

n - New Record
c - Corrected or revised record
d - Deleted record
p - Previously CIP record
a - Increase in encoding level

(3) Legend

(a) Type of Record a
a - Language material, printed

(b) Bibliographic Level m
m - Monographic

(c) Two Blank Characters

(4) Indicator Count 2

Each variable field begins with two characters called indicators which provide descriptive information about the field. The starting character position of each variable field must be incremented by two to reach the subfield code for the first data element in the field.

(5) Subfield Code Count 2

Each data element within a variable field is identified by a two-character subfield code made up of a delimited (1F₁₆, 8-bit; 37₈, 6-bit) and a lowercase alphabetic character. The starting character position of each data element must be incremented by two in order to reach the first character of data.

(6) Base Address of Data

This is the number which is the starting character position of the first control field. That is, it is equal to the length of the leader and the record directory, including the record directory field terminator. The starting character position for each field entered in the record is relative to the first character of the first control field rather than the beginning of the record. The base address of data thus gives the base from which each field is addressed. The number is right justified with leading zeros.

(7) Encoding Level

A one-character code is used to indicate the degree of completeness of the machine record. The following codes have been defined, and others may be added at a later date.

- Ø - Blank, full level. This level constitutes the most complete machine record; it indicates that the information used for converting the record was derived from a physical inspection of the item the record represents.
- 1 - Sublevel 1. This level constitutes the next most complete record after the full level. It includes information that is explicit on a catalog card or data sheet together with the tagging, subfield codes, and fixed field information that can be supplied without examination of the item being described.
- 7 - Sublevel 7. This level is used to designate all types of skeletal or initial cataloging records.
- 8 - Sublevel 8. This level is used to identify CIP records.

(8) Descriptive Cataloging Form

A one-character code is used to indicate the form of descriptive cataloging exemplified in the catalog record, i.e., whether an item has been cataloged according to the provisions of an International Standard Bibliographic Description (ISBD) or not. The following codes are used:

- b - Record is in non-ISBD(M) form
- a - Record AACR2
- i - Record is in full ISBD(M) form
- p - Record is in partial ISBD(M) form. The record contains the prescribed ISBD(M) punctuation and follows the provisions of the ISBD(M) with respect to the author statement and publisher element of the imprint; but it does not necessarily conform to other full ISBD(M) specifications, especially with respect to the conventions prescribed to indicate the source of the elements of the description.

(9) One Blank Character

(10) Entry Map

- (a) Length of length-of-field portion of each record directory entry 4
- (b) Length of starting-character position portion of each record directory entry 5
- (c) Two undefined characters 00

The entry map describes the layout of the record directory entries. In the MARC formats, each 12-character directory entry consists of the following: 3 characters for the tag, 4 characters for the length-of-field portion, and 5 characters for the starting-character position. The entry map contains the lengths of the length-of-field and the starting-character position portions of the record directory entries. The tag portion is assumed to be constant at three characters and is not described in this entry map. The last two characters of the entry map are reserved for future use and are currently set to 0.

B. RECORD DIRECTORY

Outline of Record Directory Entries

TAG	FIELD LENGTH	STARTING CHARACTER POSITION		F/T
-----	-----------------	-----------------------------------	--	-----

F/T -- Field Terminator

<u>Name of Record Directory Data Element</u>	<u>Number of Characters</u>	<u>Character Positions in Directory Entries</u>
(1) Tag	3	0-2
(2) Field Length	4	3-6
(3) Starting Character Position	5	7-11

The record directory ends with a field terminator code ($1E_{16}$, 8-bit; 36_8 , 6-bit).

CONTENTS OF RECORD DIRECTORY ENTRIES

(1) Tag

This is a three-character numeric symbol that identifies the field. Tags in this format range from 001 to 899.

(2) Field Length

This consists of four numeric characters that give the number of characters in the field identified by the tag. This count includes indicators, subfield codes, data, and a field terminator. The number is right justified with leading zeros.

(3) Starting Character Position

This consists of five numeric characters which give the character position in the record of the first character of the field. The character position is relative to a base which begins with the first character of the first field, i.e., in this format, the first character of the control number field. The first record directory entry will contain the starting character position 00000. Subsequent record directory entries will have starting character positions incremented by the field length of the previous entry.

EXAMPLE: Entry 1

001	0013	00000
-----	------	-------

Entry 2

008	0040	00013
-----	------	-------

It should be noted that in a variable field (as opposed to a control field), the first actual data character is the fifth character, i.e., the starting character position plus four. The starting character position number is right justified with leading zeros.

C. CONTROL FIELDS

Outline of a Control Field

Data Element 1	Data Element 2	Data Element 3	F/T
----------------	----------------	----------------	-----

F/T -- Field Terminator

The control fields (tags 001-009) do not use indicators or subfield codes. Data elements in these fields begin with a fixed location relative to the first character position in the field. All control fields end with a field terminator code (1E₁₆, 8-bit; 36₈, 6-bit).

CONTROL FIELD TAGS

001 Control Number

This field contains the record control number.

008 Fixed Length Data Elements

<u>Name of Data Element</u>	<u>Number of Characters</u>	<u>Character Position in Field</u>
(1) Date Entered on File	6	0-5
(2) Type of Publication Date Code	1	6
(3) Date 1	4	7-10
(4) Date 2	4	11-14
(5) Country of Issue/Publication Code	3	15-17
(6) Illustration Codes	4	18-21
(7) Intellectual Level Code	1	22
(8) Form of Reproduction Code	1	23
(9) Nature of Contents Codes	4	24-27
(10) Government Publication Code	1	28
(11) Conference Publication Indicator	1	29
(12) Festschrift Indicator	1	30
(13) Index Indicator	1	31
(14) Main Entry in Body of Entry Indicator	1	32
(15) Fiction Indicator	1	33
(16) Biography Code	1	34
(17) Language Code	3	35-37
(18) Modified Record Code	-	38
(19) Cataloging Source Code	-	39

(1) Date Entered on File

Year, month, and day in format: yymmdd

(2) Type of Publication Date Code

(3) Date 1

(4) Date 2

<u>Type Code</u>	<u>Date 1</u>	<u>Date 2</u>
** d - Detailed date	year: yyyy	month/day: mddd month: mm bb
s - Single date	year: yyyy	bb bb
r - Reprint and original dates	reprint year: yyyy	original year: yyyy
q - Questionable date	earliest possible year: yyyy bb bb	latest possible year: yyyy bb bb
n - Date unknown	initial year: yyyy	terminal year: yyyy
m - Multiple dates	actual year: yyyy	copyright year: yyyy
c - Actual and copy- right dates		

EXAMPLES:

<u>Issue date</u>	<u>Code</u>	<u>Date 1</u>	<u>Date 2</u>
May 1977	d	1977	05 bb
6 Nov 1976	d	1976	11 bb

(5) Country of Publication Code

Three character code from list: Country of Publication Codes

(6) Illustration Codes (up to 4 codes allowed, left justified)

b - No illustrations	h - Facsimiles
a - Illustrations	i - Coats of arms
b - Maps	j - Genealogical tables
c - Portraits	k - Forms
d - Charts	l - Samples
e - Plans	m - Phonodisc, phono wire, etc.
f - Plates	o - Photographs
g - Music	p - Illuminations

(7) Intellectual Level Code

- Ø - Unknown or not applicable
- j - juvenile

(8) Form of Reproduction Code

- b - Not a reproduction
- a - Microfilm
- b - Microfiche
- c - Microopaque
- d - Large-print
- f - Braille
- g - Punched paper tape
- h - Magnetic tape
- i - Multimedia
- r - Regular-print
- z - Other forms reproduction

(9) Nature of Contents Codes (up to 4 codes allowed, left justified)

- Ø - No specified nature of contents
- ** t - Technical reports
- b - Bibliographies
- c - Catalogs
- i - Indexes
- a - Abstracts
- d - Dictionaries
- e - Encyclopedias
- r - Directories
- y - Yearbooks
- s - Statistics
- f - Handbooks
- p - Programmed texts
- l - Legislation
- w - Law records and digests
- g - Legal articles
- o - Book reviews
- v - Legal cases and case notes

(10) Government Publication Code

- Ø - Not a government publication
- a - Autonomous or semi-autonomous components of sovereign federations (e.g., the Soviet Union)

- c - Multilocal (below the state level)
- f - Federal/national
- i - International intergovernmental bodies
- l - Local jurisdictions (counties, cities, towns, etc.)
- m - Multistate (at the state, provincial, territorial, etc., level)
- o - Government publication, level undetermined
- s - State, provincial, territorial, dependent, etc., jurisdictions
- u - Unknown if item is government publication
- z - Government publication -- level other than can be specified by other code values

(11) Conference Publication Indicator

- 0 - Not a conference publication
- 1 - Conference publication

(12) Festschrift Indicator

- Ø - Not a festschrift
- 1 - Festschrift

(13) Index Indicator

- Ø - No index
- 1 - Index present

(14) Main Entry in Body of Entry Indicator

- Ø - Main entry not in body of entry
- 1 - Main entry in body of entry

(15) Fiction Indicator

- Ø - Not fiction
- 1 - Fiction

(16) Biography Code

- Ø - No biographical material
- a - Autobiographical
- b - Individual biography
- c - Collective biography
- d - Contains biographical information

(17) Language Code

Three-character code from: List of Languages
and Language Codes

(18) Modified Record Code

- Ø - Record is not modified
- s - Record is shortened because record length exceeds maximum allowable length (no longer used)
- d - Record does not contain "dashed-on" information found on the corresponding manual cataloging copy
- x - Record contains characters other than on the corresponding manual cataloging copy because they are not in the character set, e.g., nonroman characters, mathematical symbols, etc.
- r - Record is completely romanized and the corresponding manual cataloging copy is in the original script
- o - Record is completely romanized and the corresponding manual cataloging copy is also romanized

(19) Cataloging Source Code

- Ø - Library of Congress cataloging
- a - Library of Congress for cataloging National Agricultural Library
- b - Library of Congress cataloging with National Library of Medicine
- c - Library of Congress cooperative cataloging
- d - Other sources
- u - unknown

D. VARIABLE FIELDS

Outline of Variable Fields

INDICATORS	SUBFIELD CODE	DATA ELEMENT 1	SUBFIELD CODE	DATA ELEMENT 2		F/T
------------	------------------	----------------	------------------	----------------	--	-----

F/T -- Field Terminator

CONTENTS OF VARIABLE FIELDS

(1) Indicators

Each variable field begins with two characters which provide descriptive information about the field. The content of the indicators is specified in the descriptions of each variable field. If the indicators are not used with a particular field, they will contain blanks.

(2) Subfield Codes

Variable fields are made up of a single data element or a group of data elements. A subfield code precedes each data element in a field and identifies the data element. The subfield code consists of two characters: a delimiter (1F₁₆, 8-bit; 37₈, 6-bit) and a lowercase alphanumeric character. (The 6-bit delimiter is in nonstandard character set I and has a shift character 73₈ in front of it.) For the purpose of these specifications, the delimiter will be represented by the typewritten graphic "\$." Subfield codes are specified in the descriptions of each variable field.

An example of a field, the title statement (245), is shown as follows with the data elements and their respective subfield codes:

\$a Short title/title proper
\$b Remainder of title
\$c Remainder of title page transcription/
statement of authorship

The title could appear as follows with hypothetical record directory entries and indicators:

Directory: 245006200156

Data: 10\$aStress corrosion cracking control
measures /\$cB.F. Brown.

In some fields, only one data element has been defined, and depending on the specific data element, it may or may not be repeated within the field preceded by the subfield code.

(3) Data Elements

All data elements in the variable fields may have variable lengths.

(4) Field Terminator

All variable fields end with a field terminator code (1E₁₆, 8-bit; 36₈, 6-bit). (The 6-bit field terminator is in nonstandard set I and has the shift character 73₈ in front of it).

VARIABLE FIELD TAGS

BIBIOGRAPHIC CONTROL NUMBERS AND CODES

Ø1Ø Library of Congress Card Number

Indicators: blank

Subfield:

\$a Library of Congress Card Number

\$z Cancelled/invalid LC Card Number

Ø17 Copyright Registration Number

Indicators: blank

Subfield:

\$a Copyright registration number

\$b Source of registration number

Ø2Ø International Standard Book Number (ISBN)

Indicators: blank

Subfields:

\$a International Standard Book Number

\$b Binding information [no longer used]

\$c Terms of availability (e.g., publisher price)

\$z Cancelled/invalid ISBN

EXAMPLES: ØØ\$aØ491ØØ13Ø4

ØØ\$aØ254123456 (pbk.) :\$c\$1.95

** Ø27 Standard Technical Report Number (STRN)

This is a unique identification number for technical reports defined by American National Standards Institute (ANSI) standard number Z39.23-1974. It is composed of three parts:

report code - two to fourteen alpha/numeric characters that designate the issuing organization and in some cases a series. The National Technical Information Service is the central authority that coordinates the assignment of unique report codes and maintains a registry of such assignments.

sequential group - one to seven numeric characters assigned in sequence by each report-issuing entity.

local suffix - optional field in which the issuing organization may place additional information.

The report code and sequential group are separated by a hyphen (-), and the sequential group and local suffix are separated by an ampersand (&) or a plus sign (+). Slashes (/) may be used as subdividers within the report code (a maximum of two) and within the sequential group (after the second digit).

Indicators: blank

Subfields:

\$a Standard Technical Report Number

\$z Cancelled/invalid STRN

EXAMPLES: ~~W~~~~W~~\$aMETPRO/ED/SR-77/035
 ~~W~~~~W~~\$aMPC-387

035 Local System Control Number

Indicators: blank

Subfield:

\$a Local system control number

037 Stock Number

Indicators: blank

Subfields:

\$a Stock number

\$b Source (entity that assigned the stock number)

\$f Form of issue

\$c Terms of availability (e.g., price, price code)

EXAMPLES: ØØ\$aPB-362547\$bNational Technical Information Service\$fpaper
 copy \$c\$4.ØØ\$fmicrofiche\$c\$3.ØØ
 ØØ\$aADAØ43ØØ\$bDDC
 ØØ\$aPB-27Ø514\$bNTIS

Ø4Ø Cataloging Source Code

Indicators: blank

Subfields:

- \$a Original cataloging agency
- \$c Transcribing agency
- \$d Modifying agency

Ø41 Language Code

Contains codes from List of Languages and Language Codes available from the LC Cataloging Distribution Service.

First indicator:

Ø - Multilingual

1 - Translation or includes a translation

Second indicator: blank

Subfields:

- \$a Codes for languages of text or its translation
- \$b Codes for languages of summaries.
- \$h Codes for languages of original and intermediate translations of text

Ø43 Geographic Area Code

Contains code from Geographic Area Codes available from the LC Cataloging Distribution Service.

Indicators: blank

Subfield:

- \$a Geographic area code

EXAMPLE: Report on geological formations in North Carolina:

ØØ\$an-us-nc

KNOWLEDGE NUMBERS

Ø5Ø Library of Congress Call Number

First indicator:

Ø - Item in LC

1 - Item not in LC

Second Indicator: blank

Subfields:

\$a LC classification number

\$b Item number

EXAMPLE: ØØ\$aQC1ØØ.U556\$bno. 156

Ø6Ø National Library of Medicine Call Number

First Indicator:

Ø - Item in NLM

1 - Item not in NLM

Second indicator: blank

Subfields:

\$a NLM classification number

\$b Item number

Ø7Ø National Agricultural Library Call Number

First Indicator:

Ø- Item in NAL

1- Item not in NAL

Second indicator: blank

Subfields:

\$a NAL classification number

\$b Item number

Ø72 Subject Category Codes

First indicator: blank

Second indicator: (specifies source list of code)

Ø - NAL subject category code list

** 7 - Code source is specified in subfield \$2

Subfields:

\$a Subject category code
** \$x Subject category code subdivision
** \$2 Code source

EXAMPLE: 07\$2[]\$a17\$x02.1 (COSATI code for Navigation communication detection counter measures--communications--radio)

074 US Government Printing Office Item Number

Indicators: blank
Subfield:
\$a GPO item number

080 Universal Decimal Classification Number

Indicators: blank
Subfield:
\$a UDC number

082 Dewey Decimal Classification Number

First indicator:
0 - No edition information recorded
0 - Full edition
1 - Abridged edition
2 - Abridged NST version
Second indicator: blank
Subfield:
\$a DDC number
\$2 Source (i.e., edition number)

086 Government Document Classification Number

Indicators: blank
Subfields:
\$a Government document classification number
\$2 Source (i.e., government list)

EXAMPLE: 00\$AHE 17.302:W 58/971\$2[](Sudocs classification number)

** 088 Report Number

Contains report numbers other than those that are Standard Technical Report Numbers (STRN) which appear in field 027.

Indicators: blank

Subfield:

\$a Report numbers

EXAMPLES: 00\$aSTRATLAB-71-98
 00\$aEPA-6001/2-76-224

MAIN ENTRIES

100 Main Entry - Personal Name

First indicator: (type of personal name)

0 - Forename

1 - Single surname

2 - Multiple surname

3 - Name of Family

Second indicator: zero (0)

Subfields:

\$a Name (surnames and forenames)

\$q Qualification of name (e.g., fuller form)

\$b Numeration (roman numerals used in the entry element of a name)

\$c Titles and other words associated with the name (titles designating rank, office, nobility, terms of address, initials denoting academic degree or membership in an organization, or any other word or phrase associated with a name, e.g., clockmaker, geologist, etc.)

\$d Dates (date of birth, death, or flourishing used with
 a name)
 \$e Relator (terms that describe the relationship between
 the person and the item, e.g., ed. (editor) , tra.
 (translator)
 \$t Title (of a work)
 \$u Author affiliation
 \$4 Relator code¹

Additional subfields:

\$k Form subheading (standardized phrases added to a heading
 in order to gather together in a file the records for
 certain kinds of materials, e.g., Spurious and doubtful
 works)
 \$l Language
 \$f Date (of a work)
 \$p Name of a part/section (of a work)
 \$n Number of part/section (of a work)

EXAMPLES: 10\$aWard, Michael E., \$eed.
 20\$aRiano y Montero, Juan Facundo.
 10\$aBrown, B. F. \$uChemistry Dept.,
 American University
 10\$aMoore, E. S., \$d1935-

¹ Three Codes have been defined for use with technical reports:
 fnd = funder/sponsor
 mon = monitor/contractor
 org = originator/performer

110 Main Entry - Corporate Name

First indicator:

- Ø - Surname (inverted)
- 1 - Place or place and name
- 2 - Name (direct order)

Second indicator: zero (Ø)

Subfields:

- \$a Name of corporate body (when the name of a place occurs at the beginning of a corporate name, it is considered the highest hierarchical unit of the corporate body and, therefore, the name data element)
- \$b Each subordinate unit in hierarchy (corporate subunits after the name)
- \$c Place (including name of an institution where conference held)
- \$d Date (of conference or meeting)
- \$e Relator (terms which describe the relationship between the corporate body and the work being cataloged, e.g., defendant-appellant)
- \$t Title (of a work)
- \$u Location of corporate body
- \$4 Relator code (see field 100 for codes)

Additional subfields:

- \$k Form subheading
- \$l Language
- \$f Date (of a work)
- \$g Miscellaneous information
- \$n Number of part/section (of a work) or conference
- \$p Name of part/section (of a work) or conference

EXAMPLES: ØØ\$aCox (C. B.) Mill Company.
1Ø\$aUnited States.\$bMissouri Basin Survey Commission.
2Ø\$aUnited Technologies.\$bPower Systems Division.
2Ø\$aIndustrial Environmental Research Laboratory.
\$uResearch Triangle Park, North Carolina.
2Ø\$aInternational Labour Organization.\$bEuropean Regional
Conference\$n(2nd :\$d1968 :\$cGeneva, Switzerland

111 Main Entry - Corporate Name - Conference or Meeting

Indicators: same as field 110

Subfields:

- \$a Name (name of meeting or place element)
- \$q Name of meeting following place element
- \$n Number (number of conference or meeting)
- \$c Place (including name of institution where conference held)
- \$d Date (date of conference or meeting)

\$e Subordinate unit in name (name of subunit, e.g.,
 Delegation from Haiti)
 \$g Miscellaneous information (any additional data not identified
 by any other subfield codes, e.g., Projected, not held)
 \$t Title (of a work)
 \$u Address of conference
 \$4 Relator code

Additional subfields:

\$k Form subheading
 \$f Date (of a work)
 \$l Language
 \$p Name of part/section (of a work)
 \$n Number of a part/section (of a work) or conference

EXAMPLES: 2Ø\$aConference on Science Manuscripts,\$cWashington, D.C.,
 \$d1960.
 2Ø\$aInternational Conference on Biological Membranes,
 \$n2d,\$cFrascati,\$d1967.
 2Ø\$aRegional Conference on Mental Measurements of the
 Blind\$n(1st :\$d1956 :\$cPerkins Institution)

**** 214** Augmented Title

First indicator:

Ø - No access point (not traced)
 1 - Access point (traced)

Second indicator:

Ø-9 - Number of non-filing characters at beginning of title

Subfield:

\$a Augmented title

EXAMPLES:

Title: Development of laser velocimeter system for flame
 studies
 214 1Ø\$aDevelopment of electro-optical laser velocimeter
 system for flame studies.
 Title: Design of a van-top low-profile HF antenna
 214 ØØ\$aDesign of a van-top low-profile HF antenna; mobile
 communications

240 Uniform Title

First indicator: zero (0)

Second indicator:

0-9 - Number of non-filing characters at beginning of title

Subfield:

\$a Uniform title

Additional subfields:

\$d Date (of treaty signing)

\$f Date (of a work)

\$k Form subheading

\$l Language

\$p Name of part/section (of a work)

\$n Number of part/section (of a work)

\$s Version

\$g Miscellaneous information

\$h Media qualifier

241 Romanized Title

Indicators: same as field 214

Subfield:

\$a Romanized title

\$h Media qualifier

242 Translation of Title by Cataloging Agency

Indicators: same as field 214

Subfields:

\$a Short title/title proper

\$b Remainder of title (subtitle, etc)

\$c Remainder of title page transcription/statement of responsibility

\$h Media qualifier

\$p Name of part/section (of a work)

\$n Number of part/section (of a work)

\$y Language of translation (using MARC language code)

TITLE PARAGRAPH

245 Title Statement

Indicators: same as field 214

Subfields:

- \$a Short title/title proper
- \$b Remainder of title (subtitle, etc.)
- \$c Remainder of title page transcription/statement of responsibility
- \$h Media qualifier
- \$p Name of part/section (of a work)
- \$n Number of part/section (of a work)

EXAMPLES: 10\$aDevelopment of a ceramic tube heat exchanger
with relaxing joint /\$cMichael E. Ward ; James
C. Napier.

14\$aThe LFM model, 1976 :\$ba documentation /\$cJoseph
F. Gerrity.

10\$aEvaluations of fusion-fission (hybrid) concepts
:\$bsummary report /\$cprepared by Battelle ; Battelle
project manager R.C. Liikala ; principal investigators
U. P. Jenquin... [et al.].

10\$aReducing costs of stock transactions :\$ba study
of alternative trade completion systems : supplement
to vol. III, The computer program /\$cSally
J. Benton and Richard E. Stanton.

250 Edition Statement

Indicators: blank

Subfields:

- \$a Edition statement
- \$b Remainder of edition statement

EXAMPLE: 00\$aRevision no. 1\$bdraft, including revisions of 1970.

260 Imprint

First indicator:

0 - Publisher statement present in this field

1 - Publisher statement not present in this field

Second indicator: blank

Subfields:

\$a Place of publication

\$b Name of publisher

\$c Date of publication/issue

Additional subfields:

\$e Place of printing/manufacture

\$f Printer/manufacturer

\$g Date of printing/manufacture

EXAMPLES: 00\$aWashington, D.C. :\$bNational Bureau of Standards,
\$cJune 1977

00\$aOak Ridge, Tenn. :\$bU.S. Dept. of Energy.
\$cApril 15, 1977.

PHYSICAL DESCRIPTION FIELDS

300 Physical Description

Indicators: blank

Subfields:

\$a Extent of item (pagination or volumes)

\$b Other physical details (illustration statement)

\$c Dimensions (height)

\$e Accompanying material

EXAMPLES: 00\$a36 p. :\$b11. ;\$c21 cm.

00\$a115 p.\$b11.\$c24 cm.\$e& microfiche (3 sheets;
11 x 15 cm.) in pocket.

** 302 Page Count

Indicators: blank

Subfield:

\$a Number of pages

EXAMPLE: 00\$a112

SERIES

400 Series Statement - Personal Name/Title

First indicator: same as field 100
Second indicator: (indicates pronoun in \$a subfield that refer to main entry)
 0 - No pronoun
 1 - Pronoun used
Subfields:
 same as field 100
 \$v Volume or number
 \$x ISSN

410 Series Statement - Corporate Name/Title

First indicator: same as field 110
Second indicator: same as field 400
Subfields:
 same as field 110
 \$v Volume or number
 \$x ISSN

EXAMPLE: 10\$aUnited States.\$bNational Bureau of Standards.
 \$tMonograph\$v156

411 Series Statement - Conference Name/Title

First indicator: same as field 111
Second indicator: same as field 400
Subfields:
 same as field 111
 \$v Volume or number
 \$x ISSN

440 Series Statement - Title

First indicator: blank
Second indicator:
 0-9 - Number of non-filing characters at beginning of title
Subfields:
 \$a Title
 \$p Name of part/section (of a work)
 \$n Number of part/section (of a work)
 \$v Volume or number
 \$x ISSN

490 Series Statement - Not Access Point or Accessed Differently

First indicator:

0 - Series untraced

1 - Series traced differently

Second indicator: blank

Subfields:

\$a Series statement

\$v Volume or number

\$x ISSN

BIBLIOGRAPHIC NOTES

500 General Note

Indicators: blank

Subfield:

\$a General note

EXAMPLES: 00\$aIERL-RTP project officer of this report is W.B.
Kuykendal, 919/549-8411 Ext 2557, Mail Drop 62.

00\$aTranslation.

501 "With" Note

Indicators: blank

Subfield:

\$a "With" note

502 Dissertation Note

Indicators: blank

Subfield:

\$a Dissertation note

504 Bibliography Note

Indicators: blank

Subfields:

\$a Bibliography note

** \$b Number of references

EXAMPLES: ~~1~~\$a"Literature cited": p. 67-68.\$b19

~~1~~\$aIncludes bibliography.

505 Contents Note (Formatted)

First indicator: (type of contents note)

0 - Complete contents

1 - Incomplete contents

2 - Partial contents

Second indicator: blank

Subfields:

\$a Contents note

EXAMPLE: 20\$a--Copper alloys.--Aluminum alloys.--Titanium alloys.
--High strength steels.--Stainless steels(austenitic
ferritic).--Nickel alloys.

506 Limited Use/Restrictions Note

Indicators: blank

Subfield:

\$a Limited use/restrictions note

EXAMPLES: ~~1~~\$aClassified.

~~1~~\$aFor official use only.

510 Citation Note

Contains where a report has been indexed and/or abstracted.

First indicator:

3 - Specific location in source is not given

4 - Specific location in source is given

Second indicator: blank

Subfield:

\$a Name of source (indexing/abstracting service or bibliography)

\$c Location within source (volume and abstract, reference, or page number)

** 513 Type of Report and Period Covered Note

Indicator: blank

Subfields:

\$a Type of report

\$b Period covered

EXAMPLES: ~~1~~~~1~~\$aQuarterly technical progress report.\$bJanuary-April 1, 1977.

~~1~~~~1~~\$aInterim report.\$bJanuary-July 1977.

520 Abstract or Annotation Note

Indicators: blank

Subfields:

\$a Abstract or annotation

\$z Source

EXAMPLE: ~~1~~~~1~~\$aA number of possible methods of measuring the relaxation of flexural stress in this carbon/carbon composites are described and critically reviewed. An acoustic method is considered to be the most advantageous and is selected for use and further development.\$zDocument Control Sheet.

** 536 Funding Information Note

Indicators: blank

Subfields:

\$a Text of note

\$b Contract number

\$c Grant number

\$d Project, task, work unit number (funding number)

EXAMPLES \$a Sponsored by the U.S. Energy Research and Development
Administration. \$d 910 3450

 \$a Sponsored by the Advanced Research Projects Agency through
 the Office of Naval Research. \$b N00014-68-A-0245-0007 \$c ARPA
 Order No. 2616

 \$c EF-77-C-01-2556

** 580 Linking Entry Complexity Note

Indicators: blank

Subfields:

\$a Linking entry complexity note

\$z Source

EXAMPLES:

580 \$a Supersedes CL-72-1204 issued by the laboratory under its earlier
 name: Clinton Laboratories.

780 12 \$r CL-72-1204

SUBJECT ANALYSIS

600 Subject Added Entry - Personal Name

First indicator: same as field 100

Second indicator:

- 0 - Library of Congress subject heading
- 1 - Children's subject heading
- 2 - NLM subject heading
- 3 - NAL subject heading
- 4 - Other subject headings (source not specified)
- 5 - NLC subject heading (English)
- 6 - NLC subject heading (French)
- ** 7 - Subject heading or term (source specified in subfield \$2)

Subfields:

- same as field 100
- \$s, \$g, \$h as in field 240
- \$x General subdivision
- \$y Chronological subdivision
- \$z Geographic subdivision
- ** \$2 Source of subject term

610 Subject Added Entry - Corporate Name

First indicator: same as field 110

Second indicator: same as field 600

Subfields:

- same as field 110
- \$s, \$h as in field 240
- \$x, \$y, \$z, \$2 as in field 600

611 Subject Added Entry - Conference or Meeting

First indicator: same as field 111

Second indicator: same as field 600

Subfields:

- same as field 111
- \$s, \$h as in field 240
- \$x, \$y, \$z, \$2 as in field 600

650 Subject Added Entry - Topical Headings

** First indicator:

- Ø - No information coded
- Ø - Unspecified
- 1 - Primary term
- 2 - Secondary term

Second indicator: same as field 600

Subfields:

- \$a Topical subject term/heading (or place entry element)
- \$b Name following place entry element
- \$x General subject subdivision
- \$y Chronological subdivision
- \$z Geographic subdivision

** \$2 Source of subject term

EXAMPLES: ØØ\$aCaracas.\$bBolivar Statue.

07\$2[]\$astress-relaxation

17\$2[]\$aacoustic measurement

651 Subject Added Entry - Geographic Names

First indicator: blank

Second indicator: same as field 600

Subfields:

- \$a Geographic name (or place entry element)
- \$b Geographic name following place entry element
- \$x General subject subdivision
- \$y Chronological subdivision
- \$z Geographic subdivision

** \$2 Source of subject term

652 Subject Added Entry - Reversed Geographic

Indicators: blank

Subfields:

- \$a Geographic name or place element
- \$x General subject subdivision
- \$y Chronological subdivision
- \$z Geographic subdivision

** 653 Subject Added Entry - Uncontrolled Heading

First indicator: same as field 650

Second indicator: blank

Subfield:

- \$a Subject term

EXAMPLE: 10\$a fuel cells \$a molten carbonate \$a power generation

ADDITIONAL ENTRIES

'000 Added Entry - Personal Name

First indicator: same as field 100

Second indicator: (type of added entry)

- 0 - Alternative entry (co-authors, compilers, etc.)
- 1 - Secondary entry (illustrators, translators, arrangers, sponsoring or monitoring organization, editors, etc.)
- 2 - Analytical entry (author/title of other works contained in piece)

Subfields:

- same as field 100
- \$s, \$g, \$h as in field 240
- \$x ISSN

710 Added Entry - Corporate Name

First indicator: same as field 110
Second indicator: same as field 700
Subfields:
 same as in field 110
 \$s, \$h as in field 240
 \$x ISSN

711 Added Entry - Corporate Name - Conference or Meeting Name

First indicator: same as field 111
Second indicator: same as field 700
Subfields:
 same as field 111
 \$s, \$h as in field 240
 \$x ISSN

740 Added Entry - Variant Titles

First indicator: blank
Second indicator: as in field 700
Subfields:
 \$a Variant title
 \$h Media qualifier
 \$p Name of part/section (of a work)
 \$n Number of part/section (of a work)

LINKING ENTRIES

** 765 Original Language Entry (Translation of)

First indicator:
 0 - Generate a note
 1 - Do not generate a note
Second indicator: blank

Subfields:

\$a Corporate or personal name main entry
\$t Title proper
\$q Parallel title
\$c Qualifying information
\$g Relationship data (date and volume)
\$r Report number (Ø88)
\$u STRN (Ø27)
\$x ISSN
\$y CODEN
\$z ISBN
\$w Control number (ØØ1)

** 767 Translation Entry (Translated as)

Indicators: same as field 765
Subfields: same as field 765

** 77Ø Supplement/Special Issue Entry

Indicators: same as field 765
Subfields: same as field 765

** 772 Parent of Supplement

Indicators: same as field 765
Subfields: same as field 765

EXAMPLE:

245 1Ø\$aReducing costs of stock transactions :
\$bastudy of alternative trade completion systems : supplement
to vol. III, The computer program.

772 ØØ\$rR-552-ST

**** 775 Other Edition in Same Medium**

Indicators: same as field 765

Subfields:

same as field 765

\$b Name of edition

\$e Language code

\$f Code for country where issued

EXAMPLE: ØØ\$aNational Symposium on Food Processing Wastes, 6th, Madison,
 1975.\$tProceedings.

The report being cataloged is a reprint from the Proceedings.

**** 776 Other Edition in Different Medium**

Indicators: same as field 765

Subfields: same as field 765

**** 780 Preceding Entry**

First indicator: same as field 765

Second indicator:

2 - supersedes

3 - supersedes in part

Subfields: same as field 765

EXAMPLE: Ø2\$rSTRATLAB-71-91\$gAugust 1971

**** 785 Succeeding Entry**

First indicator: same as field 765

Second indicator:

2 - superseded by

3 - superseded in part by

Subfields: same as field 765

**** 787 Non-Specific Relationship Entry**

Indicators: same as field 765
Subfields: same as field 765

EXAMPLE:

245 00\$aTitle IV of the Civil Rights Act of 1964, a review
of program operations :\$bexecutive summary /

787 00\$tTitle of the Civil Rights Act of 1964, a review of
program operations\$rR-1901/2-HEW\$gAugust 1976.

SERIES ADDED ENTRIES

800 Series Added Entry - Personal Name/Title

First indicator: same as field 100
Second indicator: blank
Subfield:
same as field 400 (except \$x)
\$s, \$h as in field 240

810 Series Added Entry - Corporate Name/Title

First indicator: same as field 110
Second indicator: blank
Subfield:
same as field 410 (except \$x)
\$s,\$h as in field 240

811 Series Added Entry - Conference or Meeting Name/Title

First indicator: same as field 111
Second indicator: blank
Subfields:
same as field 410 (except \$x)
\$s,\$h as in field 240

ADDITIONAL VARIABLE FIELDS

The following fields are defined in the Books format,
hence may also be used for technical reports.

Ø15 National Bibliography Number
Ø25 Overseas Acquisitions Number
Ø39 Level of Bibliographic Control and Coding Detail
Ø45 Chronological Code or Date/time
Ø51 LC Copy, Issue, Offprint Statement
Ø52 Geographic Classification Code
Ø55 National Library of Canada Call Number
Ø71 NAL Copy Statement
13Ø Main Entry - Uniform Title Heading
63Ø Subject Added Entry - Uniform Heading
73Ø Added Entry - Uniform Title Heading
83Ø Series Added Entry - Uniform Title Heading

